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Table 1a. Standard errors on distribution of doctoral scientists and engineers, by field of doctorate: 1999

September 2002

Field of doctorate	Number	Percent
Total	732.2	N/A
Sciences	695.6	0.0
Computer and mathematical sciences	242.3	0.0
Computer/information sciences	126.8	0.0
Mathematical sciences	235.9	0.0
Biological and agricultural sciences	390.5	0.1
Agricultural/food sciences	374.5	0.1
Biological sciences	275.1	0.0
Environmental life sciences	285.7	0.0
Health sciences	110.7	0.0
Physical and related sciences	341.3	0.0
Chemistry except biochemistry	221.5	0.0
Earth/atmosperic/ocean sciences	138.0	0.0
Physics and astronomy	209.3	0.0
Social sciences	440.6	0.1
Economics	334.3	0.1
Political and related sciences	513.8	0.1
Sociology	317.3	0.1
Other social sciences	614.1	0.1
Psychology	209.1	0.0
Engineering	323.6	0.0
Aerospace/aeronautical engineering	326.0	0.1
Chemical engineering	528.2	0.1
Civil engineering	488.9	0.1
Electrical/computer engineering	283.3	0.0
Materials/metallurgical engineering	485.2	0.1
Mechanical engineering	564.3	0.1
Other engineering	659.8	0.1

KEY: N/A= Not applicable

NOTES: Standard errors are rounded to the nearest tenth. Survey of Doctorate Recipients includes persons who had earned a science and engineering research doctorate from an U.S. institution and resided in U.S. as of April 1999.

SOURCE: National Science Foundation/Division of Science Resources Statistics, 1999 Survey of Doctorate Recipients

Table 2a. Standard errors on demographic characteristics of doctoral scientists and engineers, by field of doctorate: 1999

September 2002

Demographic characteristic	Field of doctorate								
	All fields	Computer and information sciences	Mathematical sciences	Biological and agricultural sciences	Health sciences	Physical and related sciences	Social sciences	Psychology	Engineering
Total (number)	732.2	126.8	235.9	390.5	110.7	341.3	440.6	209.1	323.6
					Percent				
Year of doctorate									
Pre-1960	0.1	S	0.5	0.2	S	0.3	0.2	0.2	0.2
1960-69	0.1	S	0.6	0.3	0.5	0.3	0.4	0.3	0.3
1970-79	0.1	S	0.8	0.3	0.7	0.3	0.5	0.4	0.3
1980-84	0.1	0.9	0.5	0.2	0.5	0.2	0.4	0.3	0.3
1985-89	0.1	1.1	0.6	0.2	0.7	0.2	0.4	0.3	0.3
1990-92	0.1	1.2	0.5	0.2	0.6	0.2	0.3	0.3	0.2
1993-94	0.1	1.0	0.4	0.2	0.6	0.2	0.3	0.3	0.2
1995-96	0.1	1.4	0.5	0.2	0.7	0.2	0.3	0.3	0.3
1997-98	0.1	1.2	0.4	0.2	0.6	0.2	0.2	0.2	0.3
Sex									
Male	0.1	0.5	0.3	0.1	0.3	0.1	0.2	0.2	0.1
Female	0.1	0.5	0.3	0.1	0.3	0.1	0.2	0.2	0.1
Race/ethnicity									
White[1]	0.1	1.2	0.8	0.3	0.7	0.3	0.4	0.3	0.4
Black	0.1	S	S	0.1	0.4	0.1	0.2	0.1	0.1
Asian/Pacific Islander	0.1	1.4	0.7	0.3	0.6	0.3	0.3	0.2	0.5
Hispanic	0.1	S	S	0.1	S	0.1	0.2	0.2	0.2
American Indian/Alaskan Native	--	S	S	S	S	S	S	S	S
Age									
Under 35	0.1	1.5	0.8	0.2	0.6	0.3	0.3	0.3	0.4
35-39	0.2	1.9	0.8	0.3	0.8	0.4	0.4	0.4	0.5
40-44	0.2	1.9	0.8	0.4	0.9	0.4	0.5	0.4	0.4
45-49	0.2	1.6	0.8	0.4	1.1	0.4	0.6	0.5	0.4
50-54	0.2	1.5	0.9	0.3	1.3	0.4	0.7	0.5	0.4
55-59	0.2	S	0.9	0.3	1.2	0.4	0.6	0.5	0.5
60-64	0.2	S	0.8	0.3	0.7	0.4	0.5	0.4	0.5
65-75	0.1	S	0.8	0.3	0.7	0.4	0.5	0.3	0.4
Citizenship status									
U.S. citizen	0.1	1.2	0.6	0.2	0.4	0.3	0.3	0.1	0.4
Non-U.S. citizen	0.1	1.2	0.6	0.2	0.4	0.3	0.3	0.1	0.4
Permanent U.S. resident	0.7	3.2	3.1	1.8	4.2	1.6	2.1	4.2	1.3
Temporary U.S. resident	0.7	3.2	3.1	1.8	4.2	1.6	2.1	4.2	1.3

[1] 'Other' race included with 'White.'

KEY: -- = Estimate is less than 0.5 percent and estimated weighted cases >=1,000.

S = Suppressed due to too few cases in the estimate (fewer than 1,000 weighted cases).

NOTES: Standard errors are rounded to the nearest tenth. Survey of Doctorate Recipients includes persons who had earned a science and engineering research doctorate from an U.S. institution and resided in U.S. as of April 1999.

SOURCE: National Science Foundation/Division of Science Resources Statistics, 1999 Survey of Doctorate Recipients.

Table 3a. Standard errors on demographic characteristics of doctoral scientists and engineers, by years since doctorate: 1999

September 2002

Demographic characteristic	Years since doctorate				
	Total	5 years or less	6-15 years	16-25 years	More than 25 years
Total (number)	732.2	391.3	618.0	512.5	482.0
			Percent		
Sex					
Male	0.1	0.3	0.2	0.2	0.1
Female	0.1	0.3	0.2	0.2	0.1
Race/ethnicity					
White[1]	0.1	0.5	0.3	0.3	0.3
Black	0.1	0.2	0.1	0.1	0.1
Asian/Pacific Islander	0.1	0.4	0.3	0.3	0.2
Hispanic	0.1	0.2	0.2	0.1	0.1
American Indian/Alaskan Native	--	S	S	S	S
Citizenship status					
U.S. citizen	0.1	0.3	0.2	0.2	0.1
Non-U.S. citizen	0.1	0.3	0.2	0.2	0.1

[1] 'Other' race included with 'White.'

KEY: -- = Estimate is less than 0.5 percent and estimated weighted cases >=1,000.
S = Suppressed due to too few cases in the estimate (fewer than 1,000 weighted cases).

NOTES: Standard errors are rounded to the nearest tenth. Survey of Doctorate Recipients includes persons who had earned a science and engineering research doctorate from an U.S. institution and resided in U.S. as of April 1999.

SOURCE: National Science Foundation/Division of Science Resources Statistics, 1999 Survey of Doctorate Recipients.

Table 4a. Standard errors on employment status of doctoral scientists and engineers, by field of doctorate: 1999

September 2002

Employment status	Field of doctorate							
	All fields	Computer and mathematical sciences	Biological and agricultural sciences	Health sciences	Physical and related sciences	Social sciences	Psychology	Engineering
Total (number)	732.2	242.3	390.5	110.7	341.3	440.6	209.1	323.6
	Percent							
Employed full-time [1]	0.2	0.8	0.4	1.1	0.4	0.6	0.6	0.5
Employed part-time [1]	0.1	0.5	0.3	0.8	0.3	0.4	0.5	0.3
Unemployed, seeking employment	0.1	S	0.1	S	0.1	S	S	0.2
Retired	0.2	0.6	0.3	0.7	0.3	0.5	0.3	0.4
Not employed, not seeking	0.1	S	0.2	S	0.2	0.2	0.2	0.2

[1] Includes those who held postdoctoral appointments.

KEY: S = Suppressed due to too few cases in the estimate (fewer than 1,000 weighted cases).

NOTES: Standard errors are rounded to the nearest tenth. Survey of Doctorate Recipients includes persons who had earned a science and engineering research doctorate from an U.S. institution and resided in U.S. as of April 1999.

SOURCE: National Science Foundation/Division of Science Resources Statistics, 1999 Survey of Doctorate Recipients.

Table 5a. Standard errors on reasons for not working as reported by doctoral scientists and engineers, by age: 1999

September 2002

Reasons for not working	All ages	Age 64 and under	Age 65 and above
Total not employed (number)	1,174.3	861.0	791.5
		Percent	
Retired	0.8	1.3	0.4
On layoff	0.4	0.8	S
Student	0.3	0.6	S
Family responsibilities	0.5	1.0	S
Ill/disabled	0.4	0.7	0.4
Suitable job not available	0.5	1.0	S
No need or desire to work	0.6	1.1	0.7
Other reason	0.4	0.7	S

KEY: S = Suppressed due to too few cases in the estimate (fewer than 1,000 weighted cases).

NOTES: Standard errors are rounded to the nearest tenth. Survey of Doctorate Recipients includes persons who had earned a science and engineering research doctorate from an U.S. institution and resided in U.S. as of April 1999.

SOURCE: National Science Foundation/Division of Science Resources Statistics, 1999 Survey of Doctorate Recipients.

Table 6a. Standard errors on reasons for working part-time as reported by doctoral scientists and engineers, by age: 1999

September 2002

Reason for working part-time	All ages	Age 64 and under	Age 65 and above
Total employed part-time (number)	898.5	790.6	510.2
		Percent	
Retired or semi-retired	1.2	1.1	1.8
Student	0.3	0.4	S
Family responsibilities	1.0	1.3	S
Ill/disabled	0.4	0.5	S
Suitable full-time job not available	0.8	1.0	S
No need or desire for full-time work	1.2	1.3	2.2
Other reason	0.6	0.7	S

KEY: S = Suppressed due to too few cases in the estimate (fewer than 1,000 weighted cases).

NOTES: Standard errors are rounded to the nearest tenth. Survey of Doctorate Recipients includes persons who had earned a science and engineering research doctorate from an U.S. institution and resided in U.S. as of April 1999.

SOURCE: National Science Foundation/Division of Science Resources Statistics, 1999 Survey of Doctorate Recipients.

Table 7a. Standard errors on employment status of doctoral scientists and engineers, by field of doctorate and sex: 1999

September 2002

Labor force status and sex	Field of doctorate							
	All fields	Computer and mathematical sciences	Biological and agricultural sciences	Health sciences	Physical and related sciences	Social sciences	Psychology	Engineering
Total in labor force (number)	1,330.9	340.4	616.3	197.6	556.3	584.8	389.1	601.0
	Percent							
Employed full-time[1]	0.2	0.6	0.3	0.9	0.4	0.5	0.6	0.3
Employed part-time[1]	0.2	0.6	0.3	0.8	0.3	0.5	0.6	0.3
Unemployed, seeking employment	0.1	S	0.1	S	0.2	S	S	0.2
Male (number)	1,167.7	312.8	544.6	133.3	516.4	538.5	296.3	579.2
	Percent							
Employed full-time[1]	0.2	0.6	0.4	1.1	0.4	0.5	0.6	0.3
Employed part-time[1]	0.2	0.6	S	0.9	0.3	0.5	0.6	0.3
Unemployed, seeking employment	S	S	S	0.7	0.2	S	S	0.2
Female (number)	672.8	115.2	378.1	151.8	215.5	254.5	294.4	147.7
	Percent							
Employed full-time[1]	0.5	2.0	0.7	1.4	1.0	0.9	1.1	1.7
Employed part-time[1]	0.4	S	0.6	1.3	S	0.9	1.1	S
Unemployed, seeking employment	0.1	S	S	S	S	S	S	S

[1] Includes those who held postdoctoral appointments.

KEY: S = Suppressed due to too few cases in the estimate (fewer than 1,000 weighted cases).

NOTES: Standard errors are rounded to the nearest tenth. Survey of Doctorate Recipients includes persons who had earned a science and engineering research doctorate from an U.S. institution and resided in U.S. as of April 1999.

SOURCE: National Science Foundation/Division of Science Resources Statistics, 1999 Survey of Doctorate Recipients.

Table 8a. Standard errors on retirement status of doctoral scientists and engineers, by field of doctorate and age: 1999

September 2002

Age	All fields	Computer and mathematical sciences	Biological and agricultural sciences	Health sciences	Physical and related sciences	Social sciences	Psychology	Engineering
	Field of doctorate							
Total retired (number)	966.7	230.4	460.4	149.8	430.9	397.9	306.2	440.3
	Percent							
Age group								
Age 64 and below	0.8	S	1.7	S	1.8	2.4	2.9	2.8
Age 65 and above	0.8	4.3	1.7	5.4	1.8	2.4	2.9	2.8

KEY: S = Suppressed due to too few cases in the estimate (fewer than 1,000 weighted cases).

NOTES: Standard errors are rounded to the nearest tenth. Survey of Doctorate Recipients includes persons who had earned a science and engineering research doctorate from an U.S. institution and resided in U.S. as of April 1999.

SOURCE: National Science Foundation/Division of Science Resources Statistics, 1999 Survey of Doctorate Recipients.

Table 9a. Standard errors on employment sector of doctoral scientists and engineers, by field of doctorate: 1999

September 2002

Employment sector	Field of doctorate								
	All fields	Computer and information sciences	Mathematical sciences	Biological and agricultural sciences	Health sciences	Physical and related sciences	Social sciences	Psychology	Engineering
Total employed (number)	1,333.5	135.7	337.1	635.2	220.3	588.4	603.2	422.7	618.4
					Percent				
Education institution	0.3	2.3	1.4	0.6	1.6	0.7	0.9	0.8	0.6
Private industry	0.3	2.1	1.3	0.6	1.4	0.7	0.8	0.8	0.7
Government	0.2	S	0.7	0.4	0.9	0.4	0.6	0.5	0.4
Self-employed or other	0.1	S	S	0.2	S	0.2	0.4	0.7	0.3

KEY: S = Suppressed due to too few cases in the estimate (fewer than 1,000 weighted cases).

NOTES: Standard errors are rounded to the nearest tenth. Survey of Doctorate Recipients includes persons who had earned a science and engineering research doctorate from an U.S. institution and resided in U.S. as of April 1999.

SOURCE: National Science Foundation/Division of Science Resources Statistics, 1999 Survey of Doctorate Recipients.

Table 10a. Standard errors on employer characteristics of doctoral scientists and engineers, by field of doctorate: 1999

September 2002

Employer characteristic	Field of doctorate							
	All fields	Computer and mathematical sciences	Biological and agricultural sciences	Health sciences	Physical and related sciences	Social sciences	Psychology	Engineering
Total employed (number)	1,333.5	345.9	635.2	220.3	588.4	603.2	422.7	618.4
	Percent							
Employer size								
Under 10 employees	0.2	0.6	0.3	0.9	0.4	0.5	0.7	0.4
10-24 employees	0.1	S	0.2	S	0.2	0.3	0.3	0.3
25-99 employees	0.1	0.5	0.3	S	0.3	0.4	0.3	0.3
100-499 employees	0.2	0.8	0.4	0.9	0.4	0.6	0.5	0.4
500-999 employees	0.1	0.6	0.3	S	0.3	0.4	0.4	0.3
1,000-4,999 employees	0.2	0.8	0.4	1.1	0.5	0.6	0.4	0.5
5,000 or more employees	0.3	1.2	0.6	1.5	0.7	0.9	0.8	0.6
Employer a new business within past 5 years?								
Yes	0.1	0.6	0.3	0.8	0.3	0.4	0.4	0.4
No	0.1	0.6	0.3	0.8	0.3	0.4	0.4	0.4

KEY: S = Suppressed due to too few cases in the estimate (fewer than 1,000 weighted cases).

NOTES: Standard errors are rounded to the nearest tenth. Survey of Doctorate Recipients includes persons who had earned a science and engineering research doctorate from an U.S. institution and resided in U.S. as of April 1999.

SOURCE: National Science Foundation/Division of Science Resources Statistics, 1999 Survey of Doctorate Recipients.

Table 11a. Standard errors on relationship between work on principal job and doctoral degree as reported by doctoral scientists and engineers, by field of doctorate, 1999

September 2002

Relationship between principal job and doctoral degree	Field of doctorate								
	All fields	Computer and information sciences	Mathematical sciences	Biological and agricultural sciences	Health sciences	Physical and related sciences	Social sciences	Psychology	Engineering
Total employed (number)	1,333.5	135.7	337.1	635.2	220.3	588.4	603.2	422.7	618.4
	Percent								
Closely related	0.3	2.0	1.4	0.6	1.3	0.7	0.8	0.6	0.8
Somewhat related	0.3	2.0	1.3	0.6	1.2	0.6	0.7	0.6	0.7
Not related	0.2	S	0.8	0.3	S	0.5	0.4	0.3	0.4

KEY: S = Suppressed due to too few cases in the estimate (fewer than 1,000 weighted cases).

NOTES: Standard errors are rounded to the nearest tenth. Survey of Doctorate Recipients includes persons who had earned a science and engineering research doctorate from an U.S. institution and resided in U.S. as of April 1999.

SOURCE: National Science Foundation/Division of Science Resources Statistics, 1999 Survey of Doctorate Recipients.

Table 12a. Standard errors on most important reason for doctoral scientists and engineers to be working outside field of doctoral degree: 1999

September 2002

Most important reason	All fields
Total working outside doctoral degree field (number)	980.1
	Percent
Pay/promotion opportunities	1.0
Working conditions	0.4
Job location	0.5
Change in career or professional interest	1.1
Family-related reasons	0.6
Job in doctoral field not available	1.1
Other reason	0.6

NOTES: Standard errors are rounded to the nearest tenth. Survey of Doctorate Recipients includes persons who had earned a science and engineering research doctorate from an U.S. institution and resided in U.S. as of April 1999.

SOURCE: National Science Foundation/Division of Science Resources Statistics, 1999 Survey of Doctorate Recipients.

Table 13a. Standard errors on primary work activity of doctoral scientists and engineers, by years since doctorate: 1999

September 2002

Primary work activity	Years since doctorate				
	Total	5 years or less	6-15 years	16-25 years	More than 25 years
Total employed (number)	1,333.5	455.8	715.7	651.8	966.0
	Percent				
Applied research	0.3	0.6	0.5	0.5	0.6
Basic research	0.2	0.5	0.4	0.4	0.4
Development	0.1	0.4	0.2	0.3	0.3
Design	0.1	0.2	0.2	0.2	0.2
Teaching	0.3	0.5	0.4	0.5	0.7
Management, sales, and administration[1]	0.3	0.3	0.4	0.6	0.6
Computer applications	0.1	0.4	0.3	0.2	0.3
Professional services	0.2	0.4	0.3	0.4	0.4
Other activity[2]	0.1	0.2	0.2	0.2	0.3

[1] Category includes: accounting, finance, contracts; employee relations including recruiting, personnel, development, and training; managing, supervising; sales, purchasing, marketing, customer service, public relations; and quality or productivity management.

[2] Category includes: production operations, maintenance, and other activity.

NOTES: Standard errors are rounded to the nearest tenth. Survey of Doctorate Recipients includes persons who had earned a science and engineering research doctorate from an U.S. institution and resided in U.S. as of April 1999.

SOURCE: National Science Foundation/Division of Science Resources Statistics, 1999 Survey of Doctorate Recipients.

Table 14a. Standard errors on principal occupation of doctoral scientists and engineers, by employment sector: 1999

September 2002

Principal occupation	Employment sector							
	Total	University and 4-year college	Other educational institution	Private for-profit company	Self-employed	Private not-for-profit organization	U.S. government	State/local government
Total employed (number)	1,333.5	1,752.9	647.5	1,636.6	831.1	789.3	885.2	590.3
					Percent			
Science and engineering occupations	0.3	0.3	1.7	0.5	1.4	1.3	1.0	1.9
Computer and information scientist	0.1	0.2	S	0.3	S	S	0.4	S
Mathematical scientist	0.1	0.2	S	0.1	S	S	0.5	S
Life and related scientist	0.2	0.3	1.2	0.3	0.6	1.0	1.0	1.2
Physical and related scientist	0.2	0.3	1.0	0.4	0.5	0.7	1.0	1.1
Social and related scientist	0.1	0.3	0.9	0.2	0.5	0.7	0.6	S
Psychologist	0.1	0.3	1.3	0.3	1.3	1.3	0.6	1.7
Engineers	0.2	0.2	S	0.4	0.7	0.9	0.8	S
Non-science and engineering occupations	0.3	0.3	1.7	0.5	1.4	1.3	1.0	1.9
Top/mid-level managers, administrators, etc	0.2	0.2	1.3	0.5	0.7	1.2	0.8	1.5
Other non-S&E occupations	0.2	0.3	1.5	0.3	1.3	1.1	0.7	1.4

KEY: S = Suppressed due to too few cases (fewer than 1,000 weighted cases).

NOTES: Standard errors are rounded to the nearest tenth. Survey of Doctorate Recipients includes persons who had earned a science and engineering research doctorate from an U.S. institution and resided in U.S. as of April 1999.

SOURCE: National Science Foundation/Division of Science Resources Statistics, 1999 Survey of Doctorate Recipients

Table 15a. Standard errors on principal occupation of doctoral scientists and engineers, by years since doctorate: 1999

September 2002

Principal occupation	Years since doctorate				
	Total	5 years or less	6-15 years	16-25 years	More than 25 years
Total employed (number)	1,333.5	455.8	715.7	651.8	966.0
	Percent				
Science and engineering occupations	0.3	0.5	0.4	0.6	0.6
Scientists					
Computer and information scientist	0.1	0.3	0.2	0.2	0.3
Mathematical scientist	0.1	0.2	0.2	0.2	0.2
Life and related scientist	0.2	0.4	0.3	0.4	0.4
Physical and related scientist	0.2	0.4	0.3	0.3	0.4
Social and related scientist	0.1	0.3	0.3	0.3	0.3
Psychologist	0.1	0.3	0.3	0.3	0.3
Engineers	0.2	0.4	0.3	0.4	0.5
Non-science and engineering occupations	0.3	0.5	0.4	0.6	0.6
Top/mid-level managers, administrators, etc	0.2	0.3	0.3	0.5	0.5
Other non-S&E occupations	0.2	0.4	0.3	0.4	0.5

NOTES: Standard errors are rounded to the nearest tenth. Survey of Doctorate Recipients includes persons who had earned a science and engineering research doctorate from an U.S. institution and resided in U.S. as of April 1999.

SOURCE: National Science Foundation/Division of Science Resources Statistics, 1999 Survey of Doctorate Recipients

Table 16a. Standard errors on Federal Government support status of employed doctoral scientists and engineers, by field of doctorate: 1999

September 2002

Support status	Field of doctorate								
	All fields	Computer and information sciences	Mathematical sciences	Biological and agricultural sciences	Health sciences	Physical and related sciences	Social sciences	Psychology	Engineering
Total employed in 1999 (number).....	1,333.5	135.7	337.1	635.2	220.3	588.4	603.2	422.7	618.4
Total employed in 1997 (number).....	1,358.4	140.1	333.4	635.4	227.2	593.1	620.7	443.7	639.1
					Percent				
Received government support.....	0.3	2.4	1.3	0.6	1.6	0.7	0.7	0.7	0.8
No government support.....	0.3	2.4	1.3	0.6	1.6	0.7	0.7	0.7	0.8

NOTES: Standard errors are rounded to the nearest tenth. Survey of Doctorate Recipients includes persons who had earned a science and engineering research doctorate from an U.S. institution and resided in U.S. as of April 1999.

SOURCE: National Science Foundation/Division of Science Resources Statistics, 1999 Survey of Doctorate Recipients

Table 17a. Standard errors on Federal Government support status of employed doctoral scientists and engineers, by employment sector: 1999

September 2002

Support status	Employment sector							
	All sectors	University and 4-year college	Other educational institution	Private for-profit	Self-employed	Private not-for-profit	Federal Government	State and local government
Total employed in 1999 (number).....	1,333.5	1,752.9	647.5	1,636.6	831.1	789.3	885.2	590.3
Total employed in 1998 (number).....	1,358.4	1,733.6	649.1	1,661.1	830.2	777.0	880.8	587.5
					Percent			
Received government support.....	0.3	0.5	1.3	0.4	0.8	1.5	S	1.9
No government support.....	0.3	0.5	1.3	0.4	0.8	1.5	0.2	1.9

KEY: S = Suppressed due to too few cases in the estimate (fewer than 1,000 weighted cases).

NOTES: Standard errors are rounded to the nearest tenth. Survey of Doctorate Recipients includes persons who had earned a science and engineering research doctorate from an U.S. institution and resided in U.S. as of April 1999.

SOURCE: National Science Foundation/Division of Science Resources Statistics, 1999 Survey of Doctorate Recipients.

Table 18a. Standard errors on Federal agencies and departments supporting work of doctoral scientists and engineers: 1999

September 2002

Federal agency or department	Standard error
Total receiving Federal Government support (number)	1,596.3
	Percent
Agency for International Development (AID)	0.1
Agriculture Department	0.3
Commerce Department	0.2
Defense Department (DoD)	0.5
Department of Education (includes NCES, OERI, FIPSE, FIRST)	0.2
Energy Department (DOE)	0.4
Environmental Protection Agency (EPA)	0.2
Health and Human Services Department (excluding NIH)	0.3
Interior Department	0.2
National Aeronautics and Space Administration (NASA)	0.3
National Institutes of Health (NIH)	0.5
National Science Foundation (NSF)	0.5
Transportation Department (DOT)	0.2
Other	0.3

NOTES: Standard errors are rounded to the nearest tenth. Survey of Doctorate Recipients includes persons who had earned a science and engineering research doctorate from an U.S. institution and resided in U.S. as of April 1999.

SOURCE: National Science Foundation/Division of Science Resources Statistics, 1999 Survey of Doctorate Recipients

Table 19a. Standard errors on academically employed doctoral scientists and engineers, by field of doctorate and faculty rank: 1999

September 2002

Faculty rank	Field of doctorate								
	All fields	Computer and information sciences	Mathematical sciences	Biological and agricultural sciences	Health sciences	Physical and related sciences	Social sciences	Psychology	Engineering
Total employed in academe (number)	1,715.0	221.1	408.1	884.1	341.7	728.1	833.1	681.7	633.1
	Percent								
Professor	0.4	S	1.8	0.7	1.7	1.3	1.0	1.2	1.7
Associate professor	0.4	3.4	1.6	0.7	2.2	0.9	1.0	1.2	1.3
Assistant professor	0.3	3.4	1.4	0.7	1.8	0.8	0.8	1.1	0.9
Instructor, lecturer, adjunct faculty	0.2	S	S	0.4	S	0.6	0.6	0.7	0.7
Not applicable at institution	0.1	S	S	S	S	0.5	S	S	S
Not applicable for position	0.3	S	S	0.7	1.4	0.9	0.6	1.0	0.8

KEY: S = Suppressed due to too few cases in the estimate (fewer than 1,000 weighted cases).

NOTES: Standard errors are rounded to the nearest tenth. Survey of Doctorate Recipients includes persons who had earned a science and engineering research doctorate from an U.S. institution and resided in U.S. as of April 1999.

SOURCE: National Science Foundation/Division of Science Resources Statistics, 1999 Survey of Doctorate Recipients.

Table 20a. Standard errors on academically employed doctoral scientists and engineers, by years since doctorate, sex, and faculty rank: 1999

September 2002

Sex and faculty rank	Total	Years since doctorate: 5 years or less	6-15 years	16-25 years	More than 25 years
Total employed in academe (number)	1,715.0	702.3	1,020.5	969.6	970.5
			Percent		
Professor	0.4	S	0.6	0.9	0.9
Associate professor	0.4	0.4	0.9	0.9	0.7
Assistant professor	0.3	0.9	0.8	0.4	S
Instructor, lecturer, adjunct faculty	0.2	0.6	0.5	0.4	0.5
Not applicable at institution	0.1	S	0.3	0.3	S
Not applicable for position	0.3	1.0	0.6	0.6	0.5
Male (number)	1,572.7	551.7	871.2	872.1	973.1
			Percent		
Professor	0.5	S	0.8	1.0	0.9
Associate professor	0.5	0.5	1.1	1.0	0.7
Assistant professor	0.4	1.3	0.9	0.4	S
Instructor, lecturer, adjunct faculty	0.2	0.8	0.5	0.5	0.4
Not applicable at institution	0.2	S	0.3	S	S
Not applicable for position	0.4	1.4	0.7	0.6	0.5
Female (number)	795.5	474.2	511.2	402.4	253.0
			Percent		
Professor	0.7	S	0.8	1.9	2.7
Associate professor	0.7	S	1.3	2.1	2.4
Assistant professor	0.7	1.3	1.3	1.0	S
Instructor, lecturer, adjunct faculty	0.5	0.9	0.9	1.0	S
Not applicable at institution	0.2	S	S	S	S
Not applicable for position	0.7	1.3	1.0	1.1	S

KEY: S = Suppressed due to too few cases in the estimate (fewer than 1,000 weighted cases).

NOTES: Standard errors are rounded to nearest tenth. Survey of Doctorate Recipients includes persons who had earned a science and engineering research doctorate from an U.S. institution and resided in U.S. as of April 1999.

SOURCE: National Science Foundation/Division of Science Resources Statistics, 1999 Survey of Doctorate Recipients.

Table 21a. Standard errors on academically employed doctoral scientists and engineers, by field of doctorate and tenure status: 1999

September 2002

Tenure status	Field of doctorate								
	All fields	Computer and information sciences	Mathematical sciences	Biological and agricultural sciences	Health sciences	Physical and related sciences	Social sciences	Psychology	Engineering
Total employed in academe (number).....	1,715.0	221.1	408.1	884.1	341.7	728.1	833.1	681.7	633.1
					Percent				
Tenured.....	0.5	3.7	1.5	0.9	2.1	1.2	0.9	1.5	1.5
On tenure track.....	0.3	3.4	1.3	0.6	1.7	0.8	0.7	1.0	1.0
Not on tenure track.....	0.3	S	1.0	0.6	1.5	0.8	0.6	0.9	0.8
No tenure system at institution.....	0.2	S	S	0.4	S	0.6	0.4	0.8	0.7
No tenure for position.....	0.4	S	0.9	0.8	1.4	1.0	0.7	1.1	1.1

KEY: S = Suppressed due to too few cases in the estimate (fewer than 1,000 weighted cases).

NOTES: Standard errors are rounded to nearest tenth. Survey of Doctorate Recipients include persons who had earned a science and engineering research doctorate from an U.S. institution and resided in U.S. as of April 1999.

SOURCE: National Science Foundation/Division of Science Resources Statistics, 1999 Survey of Doctorate Recipients.

Table 22a. Standard errors on academically employed doctoral scientists and engineers, by years since doctorate, sex, and tenure status: 1999

September 2002

Sex and tenure of status	Years since doctorate				
	Total	5 years or less	6-15 years	16-25 years	More than 25 years
Total employed in academe (number)	1,715.0	702.3	1,020.5	969.6	970.5
			Percent		
Tenured	0.5	0.4	0.8	0.8	0.8
On tenure track	0.3	0.9	0.7	0.3	0.3
Not on tenure track	0.3	0.8	0.6	0.5	0.4
No tenure system at institution	0.2	0.4	0.4	0.5	0.4
No tenure for position	0.4	1.0	0.6	0.6	0.6
Male (number)	1,572.7	551.7	871.2	872.1	973.1
			Percent		
Tenured	0.5	S	1.0	0.9	0.8
On tenure track	0.4	1.3	0.9	0.4	S
Not on tenure track	0.3	1.0	0.6	0.5	0.4
No tenure system at institution	0.3	0.6	0.4	0.6	0.4
No tenure for position	0.4	1.4	0.7	0.7	0.6
Female (number)	795.5	474.2	511.2	402.4	253.0
			Percent		
Tenured	0.8	S	1.3	1.9	2.5
On tenure track	0.7	1.3	1.2	S	S
Not on tenure track	0.7	1.3	1.1	1.1	S
No tenure system at institution	0.4	S	0.6	S	S
No tenure for position	0.7	1.3	1.1	1.4	S

KEY: S = Suppressed due to too few cases (fewer than 1,000 weighted cases).

NOTES: Standard errors are rounded to nearest tenth. Survey of Doctorate Recipients includes persons who had earned a science and engineering research doctorate from an U.S. institution and resided in U.S. as of April 1999.

SOURCE: National Science Foundation/Division of Science Resources Statistics, 1999 Survey of Doctorate Recipients.

Table 23a. Standard errors on characteristics of doctoral scientists and engineers on postdoc, by selected field of doctorate: 1999

September 2002

Demographic characteristic	Field of doctorate		
	All fields	Biological and agricultural sciences	Other fields
Total postdocs (number)	600.5	434.3	419.9
		Percent	
Years since doctorate			
5 years or less	1.1	1.3	1.9
6-10 years	1.1	1.4	1.7
11-15 years	S	S	S
More than 15 years	S	S	S
Sex			
Male	1.2	1.4	2.1
Female	1.2	1.4	2.1
Race/ethnicity			
White[1]	1.4	1.7	2.2
Black	S	S	S
Asian/Pacific Islander	1.3	1.6	2.0
Hispanic	0.5	S	S
American Indian/Alaskan Native	S	S	S
Age			
34 or younger	1.4	1.8	2.5
35-44	1.4	1.9	2.3
45 or older	0.7	S	S
Citizenship status			
U.S. citizen	1.3	1.5	2.1
Non-U.S. citizen	1.3	1.5	2.1
Employment sector			
Educational institution	1.3	1.7	2.2
Business/industry	1.0	1.2	1.6
Other	0.9	1.1	1.8

[1] 'Other' race included with 'White.'

KEY: -- = Estimate is less than 0.5 percent and estimated weighted cases >=1,000.
S = Suppressed due to too few cases in the estimate (fewer than 1,000 weighted cases).

NOTES: Standard errors are rounded to the nearest tenth. Survey of Doctorate Recipients includes persons who had earned a science and engineering research doctorate from an U.S. institution and resided in U.S. as of April 1999.

SOURCE: National Science Foundation/Division of Science Resources Statistics, 1999 Survey of Doctorate Recipients.

Table 24a. Standard errors on primary reason for holding postdoc for doctoral scientists and engineers, by selected field of doctorate: 1999

September 2002

Reason	Field of doctorate		
	All fields	Biological and agricultural sciences	Other fields
Total postdocs (number)	600.5	434.3	419.9
		Percent	
Primary reason for holding postdoc			
Additional training in field	1.3	1.5	1.9
Training out of field	0.9	1.1	1.5
Work with specific person or place	1.2	1.5	2.0
No other employment available	1.0	1.3	2.0
Postdoc generally expected for career in this field	1.3	1.8	1.9
Other reason	S	S	S

KEY: S = Suppressed due to too few cases in the estimate (fewer than 1,000 weighted cases).

NOTES: Standard errors are rounded to the nearest tenth. Survey of Doctorate Recipients includes persons who had earned a science and engineering research doctorate from an U.S. institution and resided in U.S. as of April 1999.

SOURCE: National Science Foundation/Division of Science Resources Statistics, 1999 Survey of Doctorate Recipients.

Table 25a. Standard errors on second job status of doctoral scientists and engineers, by employment sector of principal job: 1999

September 2002

Second job status and occupation	Employment sector of principal job							
	All sectors	Universities and 4-year colleges	Other educational institutions	Private for-profit	Self-employed	Private not-for-profit	Federal Government	State and local government
Total employed (number)	1,333.5	1,752.9	647.5	1,636.6	831.1	789.3	885.2	590.3
	Percent							
Held second job	0.2	0.4	1.5	0.3	1.2	1.2	0.7	1.7
No second job	0.2	0.4	1.5	0.3	1.2	1.2	0.7	1.7
Total holding second job (number)	1,342.3	893.0	336.1	588.9	396.6	375.8	269.6	291.7
Occupation of second job								
	Percent							
Science and engineering occupations	0.9	1.2	2.9	2.1	3.5	3.0	3.9	3.3
Computer and information scientists	0.4	0.5	S	1.0	S	S	S	S
Mathematical scientists	0.3	0.5	S	S	S	S	S	S
Life and related scientists	0.5	0.7	S	S	S	S	S	S
Physical and related scientists	0.4	0.6	S	1.1	S	S	S	S
Social and related scientists	0.6	0.9	S	S	S	S	S	S
Psychologists	0.6	0.9	3.0	1.4	3.2	3.1	S	3.7
Engineers	0.4	0.7	S	1.2	S	S	S	S
Non-science and engineering occupation	0.9	1.2	2.9	2.1	3.5	3.0	S	S
Top/mid-level managers, administrators, etc.	0.4	0.6	S	S	S	S	S	S
Other non-S&E occupations	0.9	1.2	3.0	2.0	3.5	3.0	S	S

KEY: S = Suppressed due to too few cases (fewer than 1,000 weighted cases).

NOTES: Standard errors are rounded to the nearest tenth. Survey of Doctorate Recipients includes persons who had earned a science and engineering research doctorate from an U.S. institutions and resided in U.S. as of April 1999.

SOURCE: National Science Foundation/Division of Science Resources Statistics, 1999 Survey of Doctorate Recipients.

Table 26a. Standard errors on relationship of work on second job and doctoral degree by doctoral scientists and engineers, by field of doctorate: 1999

September 2002

Relationship	Field of doctorate							
	All fields	Computer and mathematical sciences	Biological and agricultural sciences	Health sciences	Physical and related sciences	Social sciences	Psychology	Engineering
Total holding second job (number).....	1,342.3	235.4	603.4	271.7	469.0	545.4	552.7	381.2
	Percent							
Closely related.....	0.8	4.3	2.1	3.4	2.5	2.1	1.2	2.2
Somewhat related.....	0.7	4.0	1.8	3.3	2.1	1.8	1.0	1.9
Not related.....	0.6	S	1.6	S	2.3	1.3	0.7	1.7

KEY: S = Suppressed due to too few cases in the estimate (fewer than 1,000 weighted cases).

NOTES: Standard errors are rounded to the nearest tenth. Survey of Doctorate Recipients includes persons who had earned a science and engineering research doctorate from an U.S. institutions and resided in U.S. as of April 1999.

SOURCE: National Science Foundation/Division of Science Resources Statistics, 1999 Survey of Doctorate Recipients.

Table 27a. Standard errors on employment changes in doctoral scientists and engineers since 1997, by field of doctorate: 1999

September 2002

Employment change	Field of doctorate							
	All fields	Computer and mathematical sciences	Biological and agricultural sciences	Health sciences	Physical and related sciences	Social sciences	Psychology	Engineering
Total employed in 1999 (number)	1,333.5	345.9	635.2	220.3	588.4	603.2	422.7	618.4
	Percent							
Not employed in 1997	0.1	0.4	0.2	S	0.3	0.3	0.3	0.3
No change since 1997	0.3	1.0	0.5	1.3	0.7	0.7	0.7	0.7
Change in employer and job	0.2	0.6	0.4	0.9	0.5	0.5	0.5	0.5
Change in employer only	0.1	0.7	0.3	0.8	0.4	0.4	0.4	0.4
Change in job only	0.2	0.5	0.3	0.8	0.5	0.5	0.4	0.4

KEY: S = Suppressed due to too few cases in the estimate (fewer than 1,000 weighted cases).

NOTES: Standard errors are rounded to the nearest tenth. Survey of Doctorate Recipients includes persons who had earned a science and engineering research doctorate from an U.S. institutions and resided in U.S. as of April 1999.

SOURCE: National Science Foundation/Division of Science Resources Statistics, 1999 Survey of Doctorate Recipients.

Table 28a. Standard errors on reasons for changing employer and/or job since 1997 for doctoral scientists and engineers, by field of doctorate: 1999

September 2002

Reasons	Field of doctorate							
	All fields	Computer and mathematical sciences	Biological and agricultural sciences	Health sciences	Physical and related sciences	Social sciences	Psychology	Engineering
Total changing employer and/or job (number)	1,503.9	343.5	677.4	243.0	658.0	553.3	501.1	628.1
	Percent							
Pay or promotion opportunities	0.7	2.4	1.3	3.5	1.4	2.1	1.8	1.4
Working conditions	0.6	2.1	1.1	3.4	1.3	1.9	1.9	1.3
Job location	0.6	2.4	1.2	3.0	1.3	1.8	1.5	1.2
Change in career	0.6	2.2	1.3	3.0	1.5	2.0	1.7	1.4
Family-related reasons	0.4	S	0.9	S	1.0	1.4	1.6	0.9
School-related reasons	0.3	1.8	0.8	S	0.8	1.1	1.1	0.9
Laid off/job terminated	0.5	2.2	1.0	S	1.2	1.5	1.5	1.2
Retired	0.3	S	S	S	0.7	S	S	0.8
Other reason	0.3	S	0.5	S	0.7	1.1	S	0.6

KEY: S = Suppressed due to too few cases in the estimate (fewer than 1,000 weighted cases).

NOTES: Standard errors are rounded to the nearest tenth. Survey of Doctorate Recipients includes persons who had earned a science and engineering research doctorate from an U.S. institutions and resided in U.S. as of April 1999.

SOURCE: National Science Foundation/Division of Science Resources Statistics, 1999 Survey of Doctorate Recipients.

Table 29a. Standard errors on professional society or association membership of doctoral scientists and engineers, by field of doctorate: 1999

September 2002

Number of memberships	Field of doctorate								
	All fields	Computer and information sciences	Mathematical sciences	Biological and agricultural sciences	Health sciences	Physical and related sciences	Social sciences	Psychology	Engineering
Total (number)	732.2	126.8	235.9	390.5	110.7	341.3	440.6	209.1	323.6
					Percent				
None	0.2	2.2	1.1	0.5	1.0	0.5	0.7	0.5	0.6
One	0.2	1.9	1.2	0.5	1.1	0.6	0.6	0.7	0.6
Two	0.3	2.2	1.2	0.5	1.2	0.6	0.7	0.7	0.7
Three	0.2	1.6	1.1	0.5	1.3	0.5	0.7	0.6	0.5
Four or more	0.2	1.3	1.0	0.5	1.5	0.5	0.7	0.7	0.6

NOTES: Standard errors are rounded to the nearest tenth. Survey of Doctorate Recipients includes persons who had earned a science and engineering research doctorate from an U.S. institution and resided in U.S. as of April 1999.

SOURCE: National Science Foundation/Division of Science Resources Statistics, 1999 Survey of Doctorate Recipients.

Table 30a. Standard errors on work-related training activities of doctoral scientists and engineers, by field of doctorate: 1999

September 2002

Training areas and reasons for taking training	Field of doctorate							
	All fields	Computer and mathematical sciences	Biological and agricultural sciences	Health sciences	Physical and related sciences	Social sciences	Psychology	Engineering
Total (number)	732.2	242.3	390.5	110.7	341.3	440.6	209.1	323.6
				Percent				
Taken work-related training	0.3	1.2	0.6	1.4	0.7	0.8	0.7	0.7
No work-related training	0.3	1.2	0.6	1.4	0.7	0.8	0.7	0.7
Total taking training (number)	1,872.6	463.9	1,014.5	317.5	858.3	713.6	655.5	734.7
				Percent				
Type of training:								
Management/supervisor training	0.3	1.5	0.8	1.6	0.9	1.1	0.7	0.9
Training in occupational field	0.3	1.5	0.6	1.2	0.8	1.0	0.5	0.8
General professional training	0.4	1.4	0.6	1.5	0.8	1.1	0.6	0.9
Other work-related training	0.2	1.0	0.5	0.9	0.5	0.7	0.5	0.6
Most important reasons for taking training:								
To change occupational field	0.1	S	S	0.6	0.4	0.5	0.3	0.3
Further skills in occupational field	0.4	1.6	0.7	1.6	0.9	1.1	1.0	1.0
Licensure/certification	0.2	S	0.4	1.2	0.3	0.4	0.8	0.3
Increase opportunities	0.2	S	S	0.6	0.4	S	0.2	0.5
Learn skills for new position	0.2	0.8	S	0.7	0.5	0.5	0.3	0.6
Required or expected by employer	0.2	0.9	S	0.7	0.7	0.6	0.3	0.6
Other reasons	0.2	S	S	0.6	0.3	0.6	0.3	0.3

KEY: S = Suppressed due to too few cases in the estimate (fewer than 1,000 weighted cases).

NOTES: Standard errors are rounded to the nearest tenth. Survey of Doctorate Recipients includes persons who had earned a science and engineering research doctorate from an U.S. institution and resided in U.S. as of April 1999.

SOURCE: National Science Foundation/Division of Science Resources Statistics, 1999 Survey of Doctorate Recipients.

Table 31a. Standard errors on most important resource used and length of time taken to find first career path job for recent doctoral recipients, by field of doctorate, 1999

September 2002

Resource and length of time	Field of doctorate							
	All fields	Computer and mathematical sciences	Biological and agricultural sciences	Health sciences	Physical and related sciences	Social sciences	Psychology	Engineering
Total recent doctoral recipients holding a career path job (number)	407.2	158.7	270.4	113.7	203.7	193.6	188.9	249.0
					Percent			
Most important job search resource:								
Faculty or advisor	1.0	S	2.0	S	2.4	2.7	S	2.1
Informal channels through colleagues or friends	1.1	S	1.9	S	2.4	2.5	2.8	1.9
Professional meetings and/or journals	0.8	S	1.7	S	2.1	2.7	S	1.5
Other resource [1]	1.1	4.3	2.2	S	2.7	3.3	3.0	2.4
Length of time between completion of first doctoral degree and first career path job:								
Less than 1 month [2]	0.9	3.0	2.2	4.0	2.4	2.8	2.8	1.8
1-6 months	0.9	S	1.8	S	2.0	S	2.4	1.7
7-12 months	0.5	S	S	S	S	S	S	S
More than 12 months	0.4	S	S	S	S	S	S	S

[1] 'Other resource' includes professional recruiter, college/department placement office, electronic postings, newspapers, direct contact with company, and other.

[2] Includes those who already held a career path job before completion of doctoral degree.

KEY: S = Suppressed due to too few cases in the estimate (fewer than 1,000 weighted cases).

NOTES: Standard errors are rounded to the nearest tenth. Survey of Doctorate Recipients includes persons who had earned a science and engineering research doctorate from an U.S. institution and resided in U.S. as of April 1999.

SOURCE: National Science Foundation/Division of Science Resources Statistics, 1999 Survey of Doctorate Recipients

Table 32a. Standard errors on factors that somewhat or greatly limited career path job search by recent doctoral recipients, by field of doctorate: 1999

September 2002

Factors limiting career path job search	Field of doctorate							
	All fields	Computer and mathematical sciences	Biological and agricultural sciences	Health sciences	Physical and related sciences	Social sciences	Psychology	Engineering
Total recent doctoral recipients seeking or holding a career path job (number)	407.2	158.7	270.4	113.7	203.7	193.6	188.9	249.0
	Percent							
Factors that somewhat or greatly limited career path job search:								
Family responsibilities	1.0	4.1	2.3	S	2.6	3.0	2.9	2.3
Spouse's career or employment	1.0	4.0	2.1	S	2.6	3.1	2.9	2.1
Debt from undergraduate or graduate degree(s)	0.8	S	1.7	S	S	S	2.8	1.5
Desire to not relocate	1.1	4.5	2.1	S	2.5	3.0	3.2	2.1
Suitable job not available	1.0	S	2.1	S	2.7	3.0	3.1	2.3
Other	0.5	S	S	S	S	S	S	S

KEY: S = Suppressed due to too few cases in the estimate (fewer than 1,000 weighted cases).

NOTES: Standard errors are rounded to the nearest tenth. Survey of Doctorate Recipients includes persons who had earned a science and engineering research doctorate from an U.S. institution and resided in U.S. as of April 1999.

SOURCE: National Science Foundation/Division of Science Resources Statistics, 1999 Survey of Doctorate Recipients

Table 33a. Standard errors on areas of training in which recent doctoral recipients thought their doctoral program had somewhat or very adequately prepared them for a career, by field of doctorate: 1999

September 2002

Areas of doctoral training	Field of doctorate								
	All fields	Computer and information sciences	Mathematical sciences	Biological and agricultural sciences	Health sciences	Physical and related sciences	Social sciences	Psychology	Engineering
Total recent doctoral recipients (number)	196.5	73.8	107.9	206.6	97.9	183.7	181.5	164.4	215.8
					Percent				
General problem solving skills	0.3	2.1	1.4	0.7	1.8	0.5	1.4	1.1	0.4
Subject matter knowledge	0.3	1.6	2.5	0.6	1.5	1.0	1.5	0.9	0.6
Oral communication skills	0.6	3.2	3.5	1.0	2.3	1.6	2.2	1.4	1.4
Teaching skills	0.9	5.6	4.4	1.9	3.8	2.1	2.6	2.3	2.0
Collaboration and teamwork skills	0.8	5.0	4.2	1.5	3.0	1.9	2.6	2.0	1.7
Quantitative skills	0.5	3.0	2.9	1.0	2.2	1.0	2.1	1.5	0.7
Writing skills	0.5	2.6	4.3	1.2	1.4	1.2	1.6	0.8	1.0
Computer skills	0.6	2.1	3.6	1.5	2.6	1.5	2.1	2.3	1.0
Research integrity/ethics	0.5	3.4	3.2	1.0	1.6	1.0	1.3	1.0	1.0
Establishing contacts with colleagues in field	0.9	4.1	4.6	1.7	2.7	2.0	2.2	2.3	1.8
Management or administrative skills	1.0	S	S	2.0	4.6	2.5	3.0	3.0	2.0

NOTES: Standard errors are rounded to the nearest tenth. Survey of Doctorate Recipients includes persons who had earned a science and engineering research doctorate from an U.S. institution and resided in U.S. as of April 1999.

SOURCE: National Science Foundation/Division of Science Resources Statistics, 1999 Survey of Doctorate Recipients

Table 34a. Standard errors on first area of the doctoral program in which recent doctoral recipients would have liked more training, by field of doctorate: 1999

September 2002

Doctoral program area	Field of doctorate							
	All fields	Computer and mathematical sciences	Biological and agricultural sciences	Health sciences	Physical and related sciences	Social sciences	Psychology	Engineering
Total recent doctoral recipients (number)	196.5	133.4	206.6	97.9	183.7	181.5	164.4	215.8
Additional training desired (number)	359.3	148.1	249.8	113.9	223.2	214.0	175.4	260.0
				Percent				
General problem solving skills	0.4	S	S	S	S	S	S	S
Subject matter knowledge	0.6	S	S	S	S	S	S	S
Oral communication skills	0.6	S	S	S	S	S	S	S
Teaching skills	0.8	S	1.6	S	S	2.9	2.5	S
Collaboration and teamwork skills	0.5	S	S	S	S	S	S	S
Quantitative skills	0.5	S	S	S	S	S	S	S
Writing skills	0.6	S	S	S	S	S	S	S
Computer skills	0.7	S	1.6	S	S	S	S	S
Research integrity/ethics	S	S	S	S	S	S	S	S
Establishing contacts with colleagues in field	0.8	S	1.4	S	2.2	S	S	1.8
Management or administrative skills	0.9	S	1.6	S	2.0	S	2.5	2.1

KEY: S = Suppressed due to too few cases in the estimate (fewer than 1,000 weighted cases).

NOTES: Standard errors are rounded to the nearest tenth. Survey of Doctorate Recipients includes persons who had earned a science and engineering research doctorate from an U.S. institution and resided in U.S. as of April 1999.

SOURCE: National Science Foundation/Division of Science Resources Statistics, 1999 Survey of Doctorate Recipients

Table 35a. Standard errors on level of overall satisfaction with doctoral program by recent doctoral recipients, by field of doctorate: 1999

September 2002

Level of overall satisfaction with doctoral program	Field of doctorate								
	All fields	Computer and information sciences	Mathematical sciences	Biological and agricultural sciences	Health sciences	Physical and related sciences	Social sciences	Psychology	Engineering
Total recent doctoral recipients (number)	196.5	73.8	107.9	206.6	97.9	183.7	181.5	164.4	215.8
					Percent				
Very satisfied	0.9	S	5.1	1.8	4.1	2.4	3.0	2.8	1.9
Somewhat satisfied	0.9	S	S	1.8	S	2.2	2.9	2.6	1.9
Very or somewhat dissatisfied	S	S	S	S	S	S	S	S	S

KEY: S = Suppressed due to too few cases in the estimate (fewer than 1,000 weighted cases).

NOTES: Standard errors are rounded to the nearest tenth. Survey of Doctorate Recipients includes persons who had earned a science and engineering research doctorate from an U.S. institution and resided in U.S. as of April 1999.

SOURCE: National Science Foundation/Division of Science Resources Statistics, 1999 Survey of Doctorate Recipients